

MINERAL INDUSTRY SURVEYS

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Lead, Monthly

LEAD IN JULY 1996

Primary refinery production was up about 18% in July compared with that of June. Secondary refinery production was about the same as in June, and was about 2% more than in the same month of 1995. Reported consumption in July decreased by about 2% compared with that of June.

According to *Platt's Metals Week* published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price declined by 0.7% and 1.6%, respectively, in July.

National Defense Stockpile cash disposal of lead in July 1996 was 804 metric tons (886 short tons). Cash disposal of lead to date in fiscal year 1996 (October 1995 through July 1996) was 28,018 metric tons (30,885 short tons).

The Department of Housing and Urban Development (HUD) issued a request for comments from the general public as well as affected Federal agencies on the practical utility of certain lead-based paint information proposed to be collected through future research grants issued by HUD. Grants or cooperative agreements totaling \$2.5 million will be made available by HUD for research on specific topic areas related to residential lead hazard evaluation and control. Results from this research will be used to update the HUD guidelines for such evaluation and control (Federal Register, July 24, 1996).

The Advanced Lead Acid Battery Consortium (ALABC), Research Triangle Park, NC, recently announced plans for a new \$17.5 million research program for developing valve-regulated lead-acid (VRLA) batteries for electric vehicle (EV) applications. This 3-year program will begin in 1997. Its principal goals will be to extend battery performance beyond the targets reached in the initial research program, to act as an independent evaluator/gateway to the lead-acid battery industry, and to maximize the market penetration of VRLA-powered EV's. The new program will focus on two main areas: (1) application and demonstration of ALABC achievements, with a transfer of the resulting technology to the battery manufacturers, and (2) achieving higher specific energy and life of the battery through design research. The consortium represents over 80% of the global manufacturers of lead-acid batteries (Advanced Battery Technology, July 1996).

Cominco Ltd., Vancouver, BC, Canada, recently acquired a 25.5% interest in the Peruvian mining company Inversiones Colquijirca, whose 51% interest in Sociedad Minera El Brocal will give Cominco an interest in the 2,100 ton-per-day Colquijirca zinc-lead mine near Tinyahuarco, Pasco Department, Peru. The estimated resource at the open pit Colquijirca Mine is 70 million tons grading 7% zinc and 2% lead (Metal Bulletin, July 15, 1996).

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons)

	1995 p/		1996		
	Year total	Jan. - July	June	July	Jan. - July
Production:					
Mine (recoverable)	384,000	224,000	33,800 r/	35,600	250,000
Primary refinery 2/	374,000	218,000 r/	21,700	25,500	199,000
Secondary refinery:					
Reported by smelters/refineries	737,000	426,000	78,300 r/	78,800	549,000 3/
Estimated	193,000	112,000 r/	1,170 r/	1,190	8,230 3/
Recovered from copper-base scrap e/	15,000	8,750	1,250	1,250	8,750
Total secondary	945,000	547,000	80,700	81,200	566,000
Stocks, end of period:					
Primary refineries 2/	XX	XX	19,600 r/	19,900	XX
Secondary smelters and consumers	XX	XX	40,100 r/	46,900	XX
Imports for consumption:					
Ore and concentrates (lead content)	2,590	2,540	6	NA	2,890 4/
Refined metal	264,000	140,000	15,600	NA	123,000 4/
Consumption:					
Reported	852,000 r/	499,000	65,700 r/	64,600	469,000
Undistributed e/	522,000 r/	306,000	40,300 r/	39,600	287,000
Total	1,370,000 r/	806,000	106,000	104,000	756,000
Exports (lead content):					
Ore and concentrates	65,500	21,400	116	NA	2,840 4/
Materials excluding scrap	57,200	33,800	4,980	NA	50,800 4/
Ash and residues	8,040	2,770	266	NA	6,510 4/
TEL/TML preparations, based on lead compounds	3,210	2,350	77	NA	434 4/
Exports (gross weight): Scrap	105,000	53,900	--	NA	-- 4/
Platt's Metals Week North American producer price (cents per pound)	42.28	41.66	49.85	49.48	48.64

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Data from American Bureau of Metal Statistics, Inc. (ABMS).

3/ Includes revised data from previous months.

4/ Includes data for January-June only; July data not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
1995:				
July	41.65	621.50	389.62	1.595160
Average Jan. - July	41.66	600.27	376.85	1.592805
Year average	42.28	619.00	399.81	1.578176
1996:				
April	50.24	814.55	537.29	1.516041
May	50.35	839.76	554.21	1.515236
June	49.85	796.09	516.41	1.541590
July	49.48	783.24	504.34	1.553005
Average Jan. - July	48.64	789.89	516.01	1.531095

Source: Platt's Metals Week.

TABLE 3
MINE PRODUCTION OF RECOVERABLE LEAD IN THE UNITED STATES 1/

(Metric tons)

	1995 p/		1996 p/		
	Year total	Jan. - July r/	June	July	Jan. - July
Missouri	290,000	208,000 2/	31,700 r/ 2/	33,400 2/	232,000 2/
Other States 3/	93,900 2/	16,200	2,110	2,190	18,400
Total	384,000	224,000	33,800 r/	35,600	250,000
Daily average 4/	1,050	1,060	1,130 r/	1,150	1,180

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Alaska.

3/ Includes Colorado, Idaho, Montana, and New York.

4/ Based on number of days in period without adjustment for Sundays or holidays.

TABLE 4
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JULY 1996 1/

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	June 30, 1996	receipts		July 31, 1996
Battery-lead	23,000 r/	93,100	87,700	28,400
Soft lead	W	W	W	W
Drosses and residues	W	4,020	4,120	W
Other 2/	2,280 r/	5,360	5,030	2,500
Total	25,300 r/	102,000	96,800	30,900
Percent change from preceding month	--	+0.0	+2.9	+22.2

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 5
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE
SCRAP IN JULY 1996 1/

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	40,000	--	--
Remelt lead	W	W	W
Antimonial lead	33,600	11	313
Other 2/	W	W	W
Total lead-base	78,800	34	556

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to three significant digits.

2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 6
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons)

Uses	1995		1996		
	Jan. - Dec. p/	Jan. - July	June	July	Jan. - July
Metal products:					
Ammunition-shot and bullets	52,500 r/	34,800	3,270 r/	2,400	24,400
Brass and bronze-billet and ingots	6,110	3,620	469	465	3,580
Cable covering-power and communication and calking lead-building construction	5,600	3,350	527	473	3,720
Casting metals	1,240	W	129	116	837
Pipes, traps, and other extruded products	912	559	(2/)	(2/)	(2/)
Sheet lead	11,100	6,240	797	855	5,710
Solder	6,250	3,470	335	773	3,510
Storage batteries, including oxides	700,000 r/	413,000	58,900 r/	58,300	414,000
Terne metal, type metal, bearing metals, and other metal products 3/	5,500	4,260	661	579	4,350
Total metal products	789,000 r/	470,000	65,100 r/	63,900	460,000
Other oxides	44,700	26,500	(4/)	(4/)	(4/)
Miscellaneous uses including gasoline additives	18,200 r/	3,300	687 r/	667	8,170
Total reported	852,000 r/	499,000	65,700 r/	64,600	469,000
Undistributed consumption e/	522,000 r/	306,000	40,300 r/	39,600	287,000
Grand total	1,370,000 r/	806,000	106,000	104,000	756,000

e/ Estimated. p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Withheld to avoid disclosing company proprietary data; included in "Sheet lead."

3/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

4/ Withheld to avoid disclosing company proprietary data; included in "Miscellaneous uses including gasoline additives."

TABLE 7
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN JULY 1996 1/

(Metric tons, lead content)

Type of material	Stocks June 30, 1996	Net receipts	Consumption	Stocks July 31, 1996
Soft lead	14,400 r/	37,300	37,600	14,000
Antimonial lead	22,700 r/	25,100	19,400	28,400
Lead alloys	W	8,530	7,100	W
Copper-base scrap	W	413	413	W
Total	40,100 r/	71,300	64,600	46,900

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 8
CONSUMPTION OF LEAD BY CLASS OF PRODUCT AND
TYPE OF MATERIAL IN JULY 1996 1/

(Metric tons, lead content)

Class of product	Soft lead	Antimonial lead	Lead alloys	Copper-base scrap	Total
Metal products	37,200	19,400	7,100	413	64,200
Other oxides 2/	W	--	--	--	W
Miscellaneous uses	427	W	W	--	427
Total	37,600	19,400	7,100	413	64,600

W Withheld to avoid disclosing company proprietary data; included in "Metal products."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes ceramic products, glass, other pigments and chemicals, and paints.

TABLE 9
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	1995		1996		
	Year total	June	May	June	Jan. - June
Lead content:					
Ore and concentrates	65,500	446	674	116	2,840
Materials excluding scrap	57,200	5,560	16,600	4,980	50,800
Ash and residues	8,040	18	1,530	266	6,510
TEL/TML preparations, based on lead compounds	3,210	421	37	77	434
Total	134,000	6,450	18,800	5,440	60,600
Gross weight: Scrap	105,000	8,340	--	--	--

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 10
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	1995 p/		1996			1995 p/		1996		
	Year total	Jan. - June	May	June	Jan. - June	Year total	Jan. - June	May	June	Jan. - June
Ore, matte, etc.:										
Australia	1,480	1,480	--	--	--	--	--	--	--	--
Bolivia	759	360	7	--	278	--	--	--	--	--
Canada	106,000	--	31,700	32,800	184,000	--	--	1,170	6	2,370
Mexico	2,380	2,380	--	--	390	2,380	2,380	--	--	390
Peru	12,800	7,900	1,080	790	7,600	88	88	--	--	--
Other	984	278	--	--	122	126	--	--	--	122
Total	124,000	12,400	32,800	33,600	193,000	2,590	2,470	1,170	6	2,890
Base bullion:										
Mexico	31	--	--	--	--	31	--	--	--	--
Total	31	--	--	--	--	31	--	--	--	--
Pigs and bars:										
Belgium	25	25	--	--	--	25	25	--	--	--
Bulgaria	1,910	1,910	--	--	--	1,910	1,910	--	--	--
Canada	182,000	84,700	13,900	11,400	85,000	182,000	84,700	13,900	11,400	85,000
Germany	3,140	1,730	14	14	120	3,140	1,730	14	14	120
Mexico	54,300	24,800	3,400	3,780	27,700	54,300	24,800	3,400	3,780	27,700
Netherlands	42	42	--	--	--	42	42	--	--	--
Peru	22,100	8,500	2,000	400	9,590	22,100	8,500	2,000	400	9,590
Sweden	5	5	--	--	--	5	5	--	--	--
United Arab Emirates	210	136	--	11	83	210	136	--	11	83
United Kingdom	128	50	--	--	--	128	50	--	--	--
Venezuela	364	364	--	--	--	364	364	--	--	--
Other	242	238	--	39	66	242	238	--	39	39
Total	264,000	122,000	19,400	15,600	123,000	264,000	122,000	19,400	15,600	123,000
Reclaimed scrap, including ash and residues	75	18	39	--	159	75	18	39	--	159
Grand total	388,000	135,000	52,200	49,200	315,000	267,000	135,000	20,600	15,600	126,000

p/ Preliminary.

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.



U.S. Consumption of Lead

